

# MAGNA 720 AC-DC

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A special electrode for welding dirty, greasy and heat affected cast iron. Has the following special features.

- 1. Rapid Solidification.** Magna 720 has such a rapid solidification that the weld freezes before porosity or flaws can form on dirty cast iron. This rapid solidification also makes vertical and overhead welding easy since no dripping occurs.
- 2. Ability to Bond to Dirty Cast iron.** Magna 720 can bond readily to greasy or dirty cast iron. It seals off the contamination so that sound welding can proceed. It can readily form strong bonds even on heat affected cast iron. It penetrates through the affected outer surface and bonds to the sound metal underneath.
- 3. Built-in Carbon Diffusion.** When most ordinary electrodes are applied to cast iron, a heavy area of carbon is formed at the interface. Magna 720 has the ability to diffuse the surface carbon evenly throughout the weld metal. This prevents the brittle interface area so common with ordinary cast iron electrodes.
- 4. Co-efficient of Expansion.** Magna 720 has a similar co-efficient of expansion to cast iron. It is a perfect colour match to cast iron and will rust like cast iron. Unlike nickel cast iron electrodes, if a repaired area becomes wet the weld will rust the same as base metal. It has tensile strength up to 35 kg/mm<sup>2</sup> Magna 720 welds successfully without pre-heat. However on large components pre-heat is desirable.
- 5. Typical Applications.**
  - Furnace gates.
  - Ornamental Iron fabrication.
  - Oil saturated cast iron.
  - Foundry casting repairs.
  - Steel to cast iron.

## APPLICATION:

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Use Magna 100 to completely gouge out cracks or any signs of metal fatigue. So cracks will not scatter, ensure every trace is drilled out before

commencement of weld. Drill a hole 1/2" from each end of the crack to prevent crack from propagating.

Lightly preheat to approximately 400°F to prevent stress cracking and apply Magna 720 using lowest possible current setting and a short arc. Tack weld long seams at 2" intervals. Each pass should be lightly hammered before metal cools to reduce stress.

Allow weld to cool slowly under normal conditions.

**Recommended Amperages:**

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<b>Metric</b>	<b>Inches</b>	<b>Gauge</b>	<b>Setting</b>
3.2mm.	1/8	10	70-110 amps
4.0mm.	5/32	8	95-140 amps